

From Access to Employment: Addressing the Barriers to Digital Skills Development for Nigerian Girls

Girls' Education and Skills Partnership (GESP) — A Youth Participatory Action Research and Evaluation (YPARE)

April 2026



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This work reflects a shared commitment to advancing digital inclusion, gender equity, and workforce readiness for girls and young women.



About the GESP Youth Participatory Action Research and Evaluation (YPARE)

A cornerstone of GESP's girl-centred approach is the integration of meaningful youth engagement, particularly involving girls, in the programme's monitoring processes. This is a key deliverable within GESP, ensuring that young women not only participate in the programme but also contribute to programming and policy dialogues on causes that matter to them. To advance this objective, GESP developed YPARE training materials to support structured and meaningful youth participation in monitoring activities.

Youth Participatory Action Research and Evaluation (YPARE) is a peer-led methodology that positions young people as co-researchers, knowledge creators, and agents of change. By engaging young people aged 16–24, YPARE allows participants to identify challenges, generate knowledge, and develop solutions that directly improve their lives and communities. Beyond research skills, (YPARE) builds critical thinking, leadership, communication, and advocacy capabilities, fostering ownership and agency. By actively involving young people in inquiry and decision-making, programmes can become more inclusive, relevant, and sustainable.

In Nigeria, the United Nations Children's Fund (UNICEF), through the Girls' Education and Skills Partnership (GESP) project, partnered with Yaba College of Technology (YabaTech) to implement a Youth-Led Participatory Action Research and Evaluation process. This initiative engages young girls and women as experts on issues affecting them, training them to conduct systematic research and participate effectively in programme shaping policies, programs, and community interventions.

Objective

The YPARE initiative aims to integrate meaningful youth engagement (with a particular focus on girls and young women) into monitoring, evaluation, research, and learning (MERL) processes. It seeks to equip adolescent girls and young women with skills to collect and analyse data, document findings, and contribute evidence for programmatic decision-making, ultimately supporting the development of more inclusive and effective strategies.

Scope

The research focused on issues identified through consultations with young girls to ensure relevance to the Nigerian context. Collaborating with YabaTech, young researchers engaged peers and communities to explore pressing challenges, particularly those affecting girls, ensuring a participatory and action-oriented approach that drives sustainable improvements.

The project was implemented over a seven month period (June–December 2025). It followed a structured process that included researcher selection and preparation, intensive training on YPARE principles and research methods, field data collection across multiple locations, and a final phase focused on data analysis, report writing, and advocacy planning. Through this structured, youth-led approach, girls gained research and leadership skills while contributing to actionable insights that influence policy, programmes, and community development.

Description of the YPARE process

The YPARE project was implemented over a seven-month period, running from mid-June to the end of December 2025. It followed a structured process that progressed from preparation and capacity building through to data collection, analysis, dissemination, and advocacy.

Preparatory Phase (June – July 2025):

YabaTech announced a call for expressions of interest to identify young researchers. A core project team was constituted alongside the selection of twenty young girl researchers and ten qualified researchers who served as mentors. Selected young researchers were provided with laptops to support their work. This phase also included a targeted public relations campaign and the development of digital visibility materials to raise awareness about the project.

Phase 1: Training of Trainers:

This foundational phase focused on equipping both facilitators and young female researchers with the knowledge and skills for effective YPARE. Training covered YPARE principles, ethical research involving minors, participatory research tools, and digital data management. A total of ten qualified researchers and five core team members were trained during this phase.

Phase 2: Workshop for Young Researchers on Research Planning:

This phase focused on in-person coaching and support for young researchers to develop research themes and detailed research plans. YabaTech organised a five-day workshop on the principles of the PAR approach, covering data collection methods, literature review, topic identification, use of PAR tools, and communication skills. Key outputs included finalised research topics, research questions and hypotheses, focus group discussion and key informant interview guides, and a consolidated list of proposed research tools.

Phase 3: Data Collection (September – October 2025):

Data collection was carried out over six weeks across multiple sites, including the GESP Tech Hub, YabaTech, and underserved communities such as Agege and Ayobo. Young researchers were supported throughout the fieldwork process through workshops on the use of data collection tools. The phase concluded with a summary report documenting participant feedback, challenges encountered, lessons learned, and key observations.

Phase 4: Data Analysis (October – November 2025):

This phase focused on data cleaning and analysis. Young researchers received hands-on support through workshops on questionnaire coding, data analysis tools, and the communication of research findings. Collected data were analysed and research reports were drafted. An advocacy and communication training led by UNICEF's Nigeria Country Office was also conducted to strengthen researchers' capacity to translate findings into actionable advocacy plans.

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Executive Summary

Nigeria's digital transformation agenda presents significant opportunities for employment generation, innovation, and economic growth. However, the participation of girls and young women in digital skills development remains constrained by interconnected economic, structural, and socio-cultural barriers that limit equitable access to emerging opportunities.

This consolidated report brings together evidence from five complementary Youth Participatory Action Research and Evaluation (Y-PARE) studies conducted among girls and young women aged 18–24 across Yaba College of Technology, the University of Lagos, GESP All Girls' Tech Hub Yabatech, and some underserved communities in Lagos State, Nigeria. Together, the studies provide an integrated analysis of the factors influencing girls' access to digital skills training, their participation trajectories, and the implications for workforce readiness.

The studies identify three intersecting categories of constraint. Economic barriers (including high training fees, device costs, internet data, transportation, and unreliable electricity) limit enrollment and sustained participation, particularly among girls from low-income backgrounds. As Ajara (19) put it plainly: ***"After the training, the knowledge stops for most girls because they cannot afford devices."*** Infrastructure gaps, such as unstable connectivity and inadequate access to computers, further restrict consistent engagement. Compounding both are deeply rooted gender norms and societal perceptions that frame technical ability as inherently male, reinforced through family expectations, male-dominated learning environments, and limited female role models, all of which erode confidence and discourage persistence of aspiring young women. Expanding infrastructure alone is insufficient without deliberate, gender-responsive programming that addresses these social dimensions alongside access.

Despite these challenges, the evidence consistently demonstrates the transformative impact of digital skills training when accessible and inclusive. Remilekun (20) captured this shift directly: ***"The digital skills knowledge has helped me break the stereotype that tech is only for the male gender and they do better at it than girls."*** Participants report increased confidence, strengthened motivation, improved adaptability, and greater capacity for independent learning. Many participants actively leverage digital platforms and personal networks to pursue internships, scholarships, and employment opportunities.

Overall, the findings underscore a clear policy imperative: improving girls' participation in digital skills development requires an integrated approach that addresses affordability, device and connectivity access, inclusive learning environments, mentorship, credible digital outreach, and stronger alignment between training and labour market demand.

Unlocking digital skills pathways for Nigerian girls is not only a matter of gender equity, but also is a strategic investment in youth employment, national productivity, and sustainable digital economic growth.

Chapter 1:

Introduction and Background

1.1 Nigeria's digital transformation and youth employment

Nigeria's expanding digital economy presents significant opportunities for innovation, entrepreneurship, and employment generation. Rapid growth in technology-driven sectors has reshaped labour market demands and increased the premium on digital competencies. At the same time, youth unemployment and underemployment remain pressing concerns. While digital sectors continue to expand, access to the skills required to participate in these opportunities is unevenly distributed. Structural inequalities, income disparities, and gender norms limit who is able to benefit from the digital transition.

1.2 Gender gaps in digital skills participation

Despite growing awareness of the opportunities that digital skills can unlock, girls and young women in Nigeria face a well-documented participation gap that cuts across income levels, geographies, and institutional settings.

Our research points to the intersection of economic disadvantage and structural exclusion. Where households must prioritise limited resources, girls are less likely to access personal devices, afford training fees, or maintain reliable internet connectivity. Domestic responsibilities further compound these constraints, reducing the time girls can dedicate to learning.

Underlying these access barriers are entrenched gender norms that shape both opportunity and aspiration. The framing of technical careers as male domains (reinforced through family expectations, school environments, and the absence of female role models) discourages girls from pursuing or persisting in digital skills pathways. Closing the digital gender gap therefore requires infrastructure investment alongside deliberate, gender-responsive approaches that address the structural inequities shaping who gets to participate.

1.3 Linking digital skills to employment outcomes

Digital skills training holds transformative potential in preparing girls and young women for workforce readiness. Beyond technical competencies, participation in digital learning has been shown to strengthen self-confidence, adaptability, problem-solving ability, and independent learning capacity, all essential attributes for navigating today's dynamic labour market.

For girls from low-income communities, accessible digital skills pathways can open opportunities in remote work, entrepreneurship, and formal employment sectors. However, when affordability and structural barriers restrict consistent access, these potential gains remain unrealised. Addressing participation gaps is therefore both a gender equity issue and an economic imperative.

1.4 Purpose and structure of this report

This consolidated report brings together five youth-led participatory studies conducted under the Youth Participatory Action Research and Evaluation (Y-PARE). Our research examined the barriers shaping girls' access to digital skills development across tertiary institutions and underserved communities in Lagos State, Nigeria. Each chapter presents findings from one study, exploring specific dimensions of economic, structural, and socio-cultural constraints.

The chapters collectively provide evidence to inform more inclusive programme design, strengthen advocacy efforts, and guide policy responses to expand access to digital skills for Nigerian girls. Our report concludes with a synthesis of findings and actionable recommendations for government, corporate actors, educational institutions, and development partners.

Beyond the research itself, participation in this initiative equipped the twenty young researchers with transferable skills in data collection, qualitative and quantitative analysis, report writing, and evidence based advocacy

These competencies extend well beyond this project, positioning the researchers as informed advocates for their peers and communities, and as capable contributors to future research and policy processes.

Chapter 2:

Unified Research Methodology

Throughout the research process, the 20 young researchers worked closely with qualified mentors and facilitators from Yaba College of Technology. Mentors provided structured guidance at each stage, supporting the design of data collection tools, supervising fieldwork, facilitating workshops on data analysis and coding, and offering feedback during the report writing process.

This collaborative model ensured that while the research was genuinely youth-led, the quality of the methodology, analysis, and written outputs was strengthened by consistent academic oversight. The findings and writing presented in this report reflect that partnership.

2.1 Research design

Our study employed a mixed-methods research design, combining quantitative and qualitative approaches to comprehensively examine girls' participation in digital skills training. The mixed-methods approach was selected to capture both measurable patterns and lived experiences, providing statistical evidence of trends and showing the complex social, economic, and cultural factors that shape girls' engagement with digital learning opportunities.

The quantitative component involved structured surveys administered through online platforms, capturing data on patterns of access, participation rates, confidence levels, and perceptions of barriers. These surveys provided numerical evidence of trends in device ownership, internet access, family income levels, and self-reported confidence in digital skills.

The qualitative component consisted of Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) that allowed participants to share personal experiences, reflect on social expectations, and discuss the factors that influence their learning. This approach revealed not just what barriers exist, but how girls experience and navigate them, and what strategies prove most effective in overcoming challenges.

2.2 Research setting and locations

Our research was conducted across multiple strategic locations in Lagos State, Nigeria, selected to represent diverse educational contexts and varying levels of access to digital resources.

Primary research sites



University of Lagos (UNILAG), Akoka, Lagos Nigeria:



A federal university offering diverse academic and technology programmes. Students at UNILAG navigate a competitive academic environment with relatively higher access to digital tools. However, gender stereotypes may still affect participation, particularly in technical fields such as the Faculty of Engineering.



Yaba College of Technology (Yabatech), Yaba Lagos, Nigeria:



Nigeria's leading polytechnic institution focused on technical and vocational education. Students at Yabatech provided valuable insights into how gender stereotypes operate within structured, male-dominated technical training environments.



All Girls Tech Hub (GESP), Yabatech:



A dedicated learning space where girls acquire technical and digital skills, including coding and design. This girls-only setting highlights how supportive, gender-specific spaces can challenge stereotypes, build confidence, and encourage active participation in technology.



Community Research Sites

Additional data collection occurred in the underserved communities of Agege and Ayobo in western Lagos, Nigeria. These densely populated areas have limited social amenities, such as digital skills centres and internet access. Power supply is unstable and often privately provided and access to the internet is costly compared to the average income per household.

2.3 Participant selection and description

Our study engaged 501 girls aged 15–25 years who had participated in, were currently enrolled in, or expressed interest in digital skills training.

Of these, 225 (an average of 45 per research group) took part in the qualitative component through Focus Group Discussions and Key Informant Interviews. Participants were distributed across the research locations to ensure diverse perspectives.

Purposive sampling was employed to select participants with relevant exposure to or interest in digital skills training. This means participants were deliberately identified and recruited based on specific criteria rather than selected at random. For the YPAR research, a call for interviews was circulated among GESP girls, and those who expressed interest were invited to participate.

Female students from the University of Lagos and Yaba College of Technology were also deliberately chosen based on their age (18–24) and academic background. This targeted approach ensured that all participants could speak meaningfully to the experiences and challenges under investigation. All participants were students or young women with varying levels of exposure to digital skills development.

2.4 Data collection methods

Data collection occurred over a six-week period using three complementary methods.

★ Focus Group Discussions (FGDs)

Each research organised Focus Group Discussions conducted with groups of six girls at each location. Two FGD sessions were held per location, with each group meeting three times to allow for in-depth discussions. FGD sessions explored shared experiences related to digital skills training, employment preparation, access challenges, gender stereotypes, social media engagement, and community attitudes.

★ Key Informant Interviews (KIs)

Each research also conducted individual Key Informant Interviews with three participants from each location, providing opportunities for deeper personal insights. KIs allowed participants to share detailed accounts of their personal experiences with digital skills training, family support, access to facilities, and individual learning journeys.

★ Structured Online Surveys

Quantitative data were collected through structured online questionnaires administered via KoboToolbox and Google Forms. **A total of 501 girls and young women completed surveys across the different thematic investigations.**

2.5 Data analysis approach

Qualitative data from FGDs and KIs were transcribed and coded using a thematic analysis approach. The coding process focused on identifying factors that influence girls' participation in digital skills training opportunities, organising responses into categories representing enablers and barriers.

Quantitative survey data were analysed using descriptive statistics to identify patterns and trends, examining frequency distributions, patterns in income and barriers, confidence levels, and prevalence of different barrier types.

2.6 Ethical considerations

Ethical standards were rigorously maintained throughout all phases of the research.

Informed consent was obtained from all participants prior to involvement, including explicit permission for the use of photographs appearing in this report.

Participation was voluntary, and participants could withdraw at any time without consequence. Confidentiality and anonymity were assured, with all identifying information removed from transcripts.

Participants are identified only by their first name and age to protect privacy while maintaining authentic voices. Audio and video recordings were stored securely and accessed only by authorised research team members. Participants were encouraged to use their preferred language during discussions, promoting cultural sensitivity and inclusivity.

2.7 Research limitations

Several limitations were considered when interpreting the findings. Our research focused on Lagos State, a large urban setting, and as such our findings are not generalisable to other regions in Nigeria that may experience different conditions.

Moreover, the small sample size, while providing rich insights, further limits statistical generalisability

Participants were selected through purposive sampling and had some engagement with digital learning, potentially missing the voices of girls facing severe barriers that prevent them from accessing digital training in any form.

Despite these limitations, this unified research provides valuable evidence on the barriers and enablers affecting girls' participation in digital skills training in urban and peri-urban Lagos, Nigeria. The youth-led participatory approach strengthens the credibility of the findings because the researchers share the same backgrounds and experiences as the participants. This peer dynamic encouraged more honest, open responses than a traditional adult-led research model might have produced.

The mixed-methods design adds further reliability by cross-referencing what participants said in interviews and focus groups against patterns observed in the survey data, ensuring that the findings are grounded in both personal experience and measurable evidence.

Chapter 3:

The Economic Barriers That Hinder Girls' Access to Digital Skills Training

Young researchers: [Ejiaku Chisom](#), [Ogunbowale Kanyinsola](#), [Ojeyinka Mosunmola](#), [Gbadebo Oluwaseun](#)

3.1 Introduction

Access to digital skill acquisition is essential for improving job opportunities among unemployed girls in an increasingly digital labour market (Calderón-Gómez et al., 2020). Digital skills training enhances employability and economic inclusion (Hamdan et al., 2024).

Although Lagos is a major urban centre, some densely populated communities in the western axis such as Agege and Ayobo remain underserved and access to important digital skills training is uneven across the state. In these areas, access to digital infrastructure and training facilities are limited, power supply is unstable and has to be privately provided, and internet services are costly.

As a result, many girls engage more in traditional trades such as hairdressing, tailoring and household activities rather than in digital skills training. Understanding these local conditions is important for promoting equitable access to digital skills development opportunities for girls in Lagos State.



3.2 Purpose of research

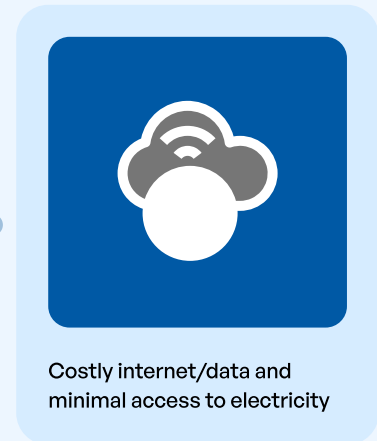
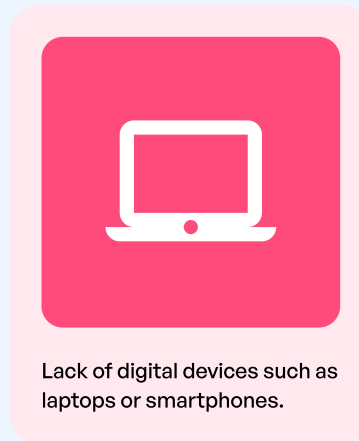
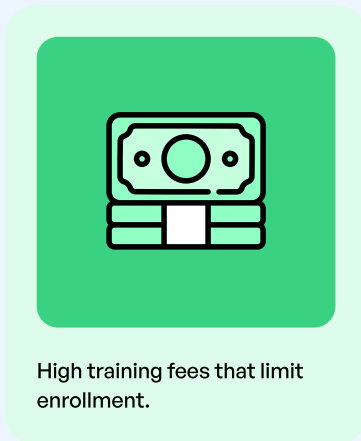
Our study examines how economic barriers influence girls' participation in digital skills training and identifies strategies to reduce these barriers. It explores the financial challenges that limit enrollment, the impact of device and transport costs, and household decision-making on girls' engagement with digital learning.

Our study also investigates how the expenses associated with gaining digital skills affect motivation, sustained participation, and skill retention amongst girls and young women.

3.3 Findings and analysis

3.3.1 Common economic barriers limiting girls' participation in digital skills training

Across all FGDs, participants consistently highlighted the following barriers as the most significant barriers to enrolling and continuing in digital skills training:



These constraints discourage initial participation and reduce sustained engagement. As Onaopemipo (17) explained: “The fees are often more than what my parents can afford, so I was unable to enroll in the training.”

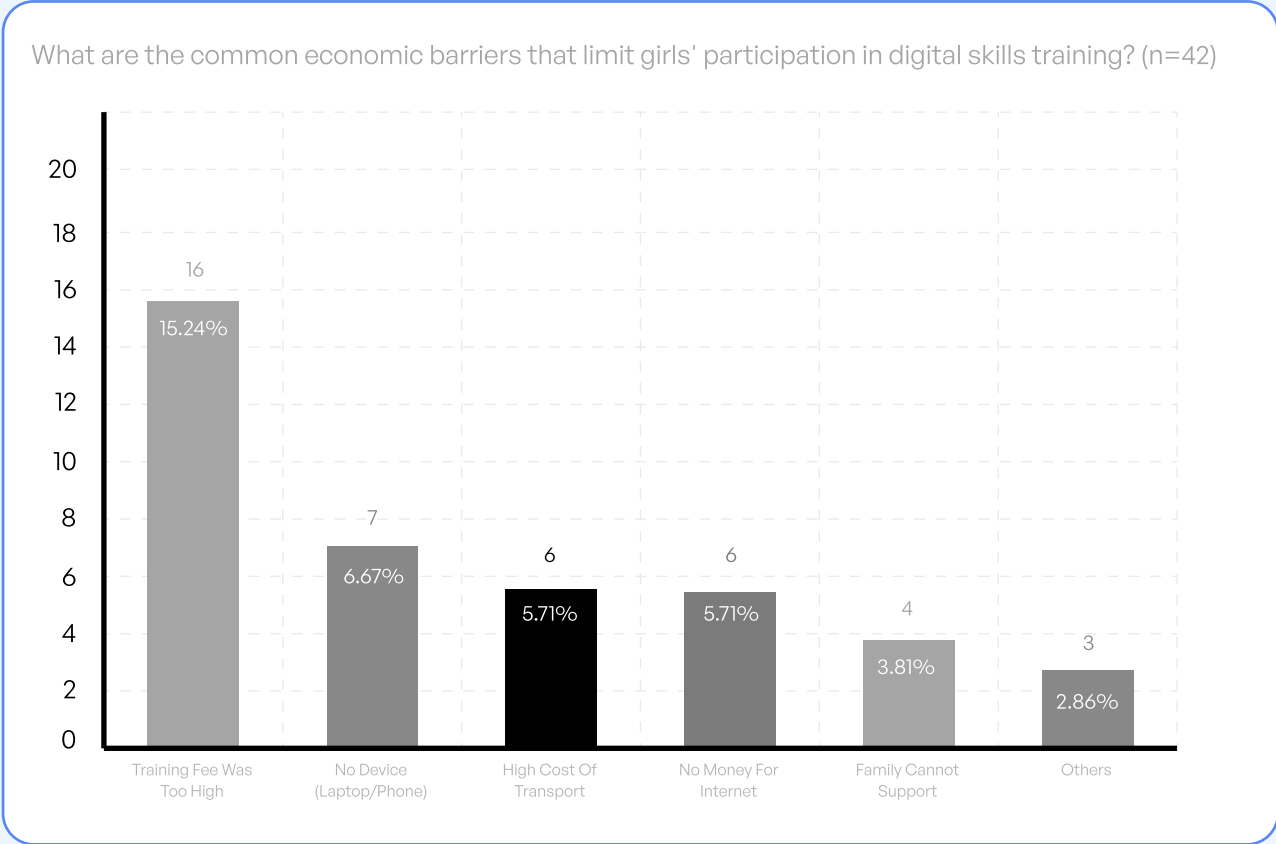


Figure 1: Common Economic Barriers Affecting Girls Participating in Digital Skills Training

Note: “Others” represents societal and cultural barriers such as gender norms.

3.3.2. Impact of digital device costs on participation of girls in digital skills training

The high cost of digital devices significantly limits girls’ participation in digital skills training in several ways. High device costs discourage parental support, particularly in rural areas, thereby reducing girls’ confidence and motivation to participate in training programmes.

“I really wanted to take part in a digital skill training but couldn’t proceed because I needed a personal device and my parents could not afford it.” - Rekiat [18]



In addition, even for participants that persevere through digital skills training without a personal device, not being able to afford one after training restricts continued practice, leading to skill loss.

Another respondent, Ajara [19] explained that “after the training, the knowledge stops for most girls because they cannot afford devices.”

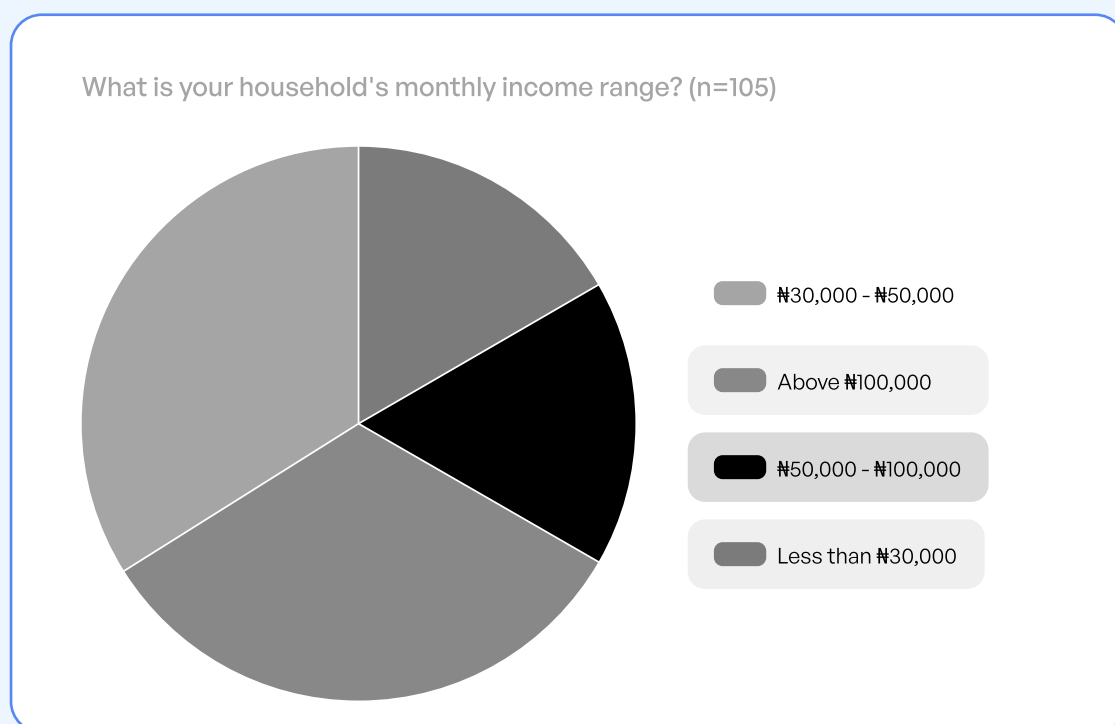


Figure 2: Household Income Levels in Agege and Ayobo

Income ranges illustrate the financial constraints influencing access to digital devices.

Note: Income figures are in Nigerian Naira (₦). Exchange rate at time of study: \$1 USD = ₦1,500.

3.3.3. Additional barriers restricting girls' access to skills training opportunities

Interviews conducted reveal that economic barriers limiting girls' access to digital skills training go beyond the cost of training itself.

Participants highlighted other financial constraints that impact participation:

★ Transportation costs:

Particularly significant in Ayobo (and not Agege), as it is located far from most training centres, with commensurate high transportation costs.

★ Safety concerns:

Girls unable to afford safe transportation face risks such as theft and physical harassment during transit, both of which discourage attendance and in some cases lead to dropout.

★ Household income prioritisation:

In many households, especially polygamous ones, parents prioritise boys' education and devices over girls', rooted in the belief that girls will marry and leave the family home while boys remain and carry on the family name.

This makes investment in girls' education appear less worthwhile to some parents, meaning that when resources are limited, girls are less likely to receive support for the training fees, devices, and transportation costs that determine whether they can participate at all.

“Some parent believe that it is a waste of time and money to train girls. That is, girls should be segregated to household duties.” - Muizzah [19]



3.4. Conclusion

The research highlights that for girls to participate in digital skills training, the environment must be both free and safe. This means free of (or minimal) financial cost and safe from physical risks such as theft and harassment during transit.

Economic barriers and safety concerns are therefore closely linked. When girls cannot afford safe transportation, exposure to these risks can cause them to reduce attendance or drop out entirely.

“Whenever there was no bus, I had to trek a long distance to get to the training, and sometimes my things would get stolen.”
- Azeezat (Ayobo, 18)



Chapter 4:

The Influence of Computer and Internet Access on Girls' Participation in Digital Skills Training

Young researchers: Agunbiade Amidat Motunrayo, Ayodele Glory, Emoyon Faith Oseiwe, Oziyuwa Eliel Chimela

4.1 Introduction

In Nigeria's rapidly evolving digital economy, the ability to use computers and access the internet determines who can participate meaningfully in emerging opportunities. However, access to these tools remains uneven, particularly for girls from disadvantaged backgrounds.

In many households, girls rely on shared family phones or outdated computers, often competing with siblings for limited usage time. Frequent power outages, high data costs, and cultural norms that prioritise boys' digital exposure further restrict their engagement. Even in an urban environment like Lagos State, Nigeria, inequality persists within institutions and training environments, reflecting broader structural and gendered disparities in access to devices and the internet.

The process of empowering women to pursue digital skills training involves providing them with the knowledge, self-assurance, and opportunity necessary to take charge of their own lives, make decisions on their own, and actively participate in society (Kaur et al., 2025). In the modern era, where everything is more digitalized and technology-related, the inequalities based on gender in accessing these are a real concern, especially for girls from disadvantaged settings. (Meherali et al., 2021)

Bridging this gap is crucial to providing women with equal opportunities for education, employment, and empowerment. Digital literacy allows women to access a wealth of educational resources available online (Asmita et al., 2023). Gender inequalities in digital access are particularly concerning for girls from disadvantaged settings. Empowering women involves equipping them with knowledge, confidence, and opportunities to make independent decisions and actively participate in society.





4.2. Purpose and objectives of the study

Our research examines how access to computers and internet connectivity influences girls' participation in digital skills training. Despite the growing importance of digital competencies, many girls face barriers that limit their ability to engage fully in digital learning.

Through both quantitative and qualitative methods, the study investigates how access to devices and reliable internet shapes participation, engagement, course completion, and confidence in digital learning environments. It further identifies the economic and infrastructural constraints that limit equitable access, examines gender disparities in digital access and their implications for learning outcomes, and proposes practical strategies to improve access to digital tools and training opportunities. The findings are intended to inform the design of more inclusive and equitable digital skills programmes.

4.3. Findings and analysis

4.3.1. Device ownership and connectivity as gatekeepers

Access to computers and reliable internet connectivity significantly influences participation and completion of digital skills training. Girls relying solely on mobile phones were able to attend virtual sessions and access online tutorials, but struggled with software requiring laptop functionality. This limited access restricted hands-on practice and slowed skill progression.

“I missed an opportunity because I didn’t have a laptop...”
- Agatha (24)

“I had the opportunity to learn graphic design but I couldn’t because I didn’t have a laptop.” - Baliquess (24)

These accounts show that even when programmes are free, implicit financial thresholds exclude girls lacking devices. A laptop becomes the entry requirement into digital opportunity.

Internet connectivity also emerged as a critical factor, with respondents affirming instances of missing windows of applying to a scholarship opportunity or free online classes because they could not afford the costs to purchase internet access.

Aishat (20) stated: *“I missed a scholarship application because I didn’t have data...”* Daniella (19) added *“I once missed a free online class because my phone was broken at that time”*

Together, these narratives reveal that participation is disrupted by the absence of hardware, high data costs, device fragility, and unstable electricity. Digital success for these girls and young women, often reflects economic capacity rather than only potential.

4.3.2. Economic and infrastructure barriers prevent girls from completing virtual courses

Access to computers and the internet is essential for digital skills development, yet financial constraints and infrastructure gaps create significant barriers for girls. Deborah (20) described her experience: *“For me, the biggest challenge is the laptop itself. I don’t have a laptop and acquiring one has been difficult...”* Her words illustrate that even motivated learners can be blocked before they start when the cost of a personal device is prohibitive.

For girls without home computers, reliance on public spaces adds further obstacles. Blessing (16) shared, *“We don’t have a computer at home, so I depend on school or cafes. And cafes can be expensive and crowded.”* Public spaces often limit concentration and learning time, with every extra minute potentially costing money, making it difficult to acquire in-depth skills.





Limited access to training hubs also constrains learning. Kehinde (24) noted, ***“It’s only available to me at the GESP hub and I only come twice a week.”*** Without a personal device, practice is restricted, slowing skill retention and progress for these young women. Beyond cost and access, the fear of additional expenses and hardware failure adds to the pressure. Happiness (19) explained, ***“I checked the price of a laptop and I saw 300k+. I’m also scared that after buying it, it’ll spoil quickly.”***

Together, these experiences highlight a systemic challenge: high costs, limited home access, and unreliable infrastructure combine to filter out girls from low-income households, making digital skills feel like a luxury accessible only to those who can afford the hardware, internet, and associated costs.

"Lack of access to computers and the internet prevents me from completing a digital skills course." (n=77)

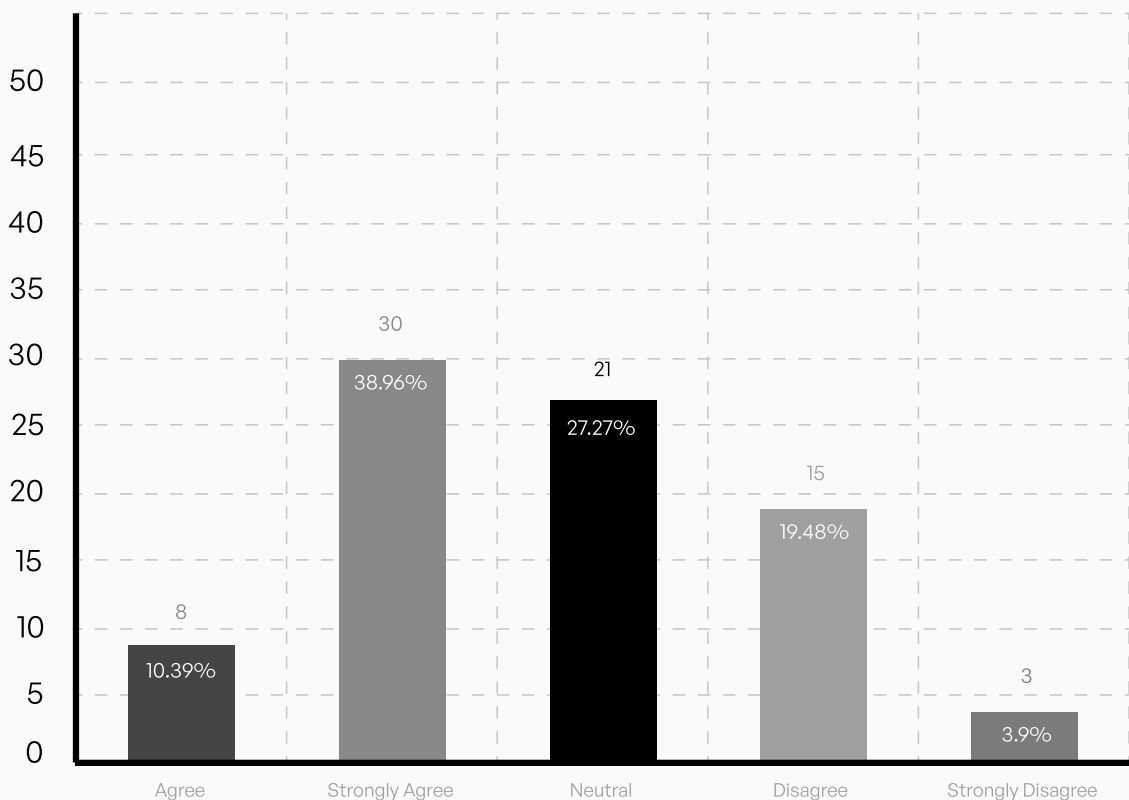


Figure 3: Impact of Limited Access to Computers and Internet on Completion of Digital Skills Courses

These experiences are reinforced by survey data. As shown in the figure above, 39% of respondents agreed that limited access to computers and the internet prevented them from completing a digital skills course, while 10% strongly agreed. Combined, this represents approximately half of all participants.

Only 19% disagreed and 4% strongly disagreed, while 27% remained neutral. The findings confirm that digital access is a foundational determinant of participating in the process of acquiring digital skills.

4.3.3. Gender disparities in access

Gender differences play a significant role in determining who has meaningful access to digital tools within many households in Lagos. In several cases, there appears to be an unspoken hierarchy where boys are prioritised in owning computers, accessing the internet, and receiving support from older, tech-savvy relatives. While boys are often encouraged to explore technology, girls are frequently constrained by household responsibilities and stricter parental controls.

Victory (21) captured this imbalance clearly: ***“My brother gets to use the computer freely, but I can only use my phone after chores are done.”*** Her experience illustrates that even when devices are available at home, girls’ access is conditional. Their study time is often dependent on completing domestic tasks, limiting both the duration and consistency of their engagement compared to their male counterparts.

This unequal access extends beyond scheduling constraints and affects emotional and psychological well-being. Fathia (19) reflected, ***“It’s painful sometimes, because you know you’re capable, but the resources are just not there for you the way they are for the boys.”*** Her statement highlights the frustration of knowing one’s potential yet being systematically disadvantaged due to gender. Similarly, Marvellous (20) explained that bias is reinforced not only within families but within the broader community: “I feel bad and hurt because most people tend to discriminate by gender. They feel boys are more capable of learning these things than girls.” These perceptions suggest that girls are simultaneously negotiating limited access at home and diminished confidence in public spaces.

The most concerning dimension of this disparity is its internal impact. Gift (19) noted, “They think girls have low IQ and that boys have more capabilities than girls. And that is enough to make girls feel inferior.” Such narratives move beyond material exclusion into psychological barriers. While limited access to laptops represents a tangible constraint, repeated messages about intellectual inferiority can discourage girls from attempting to participate at all.

Altogether, these testimonies demonstrate that the digital divide is deeply impacted by resource availability and by rooted cultural expectations. Even when devices and internet connectivity are present in a household, prevailing norms about gender roles often restrict girls’ ability to fully engage in digital skills training. As a result, disparities in access extend beyond infrastructure and are reinforced by social attitudes that continue to sideline girls in digital spaces.

"Girls face more barriers than boys when it comes to accessing computers and the internet." (n=74)

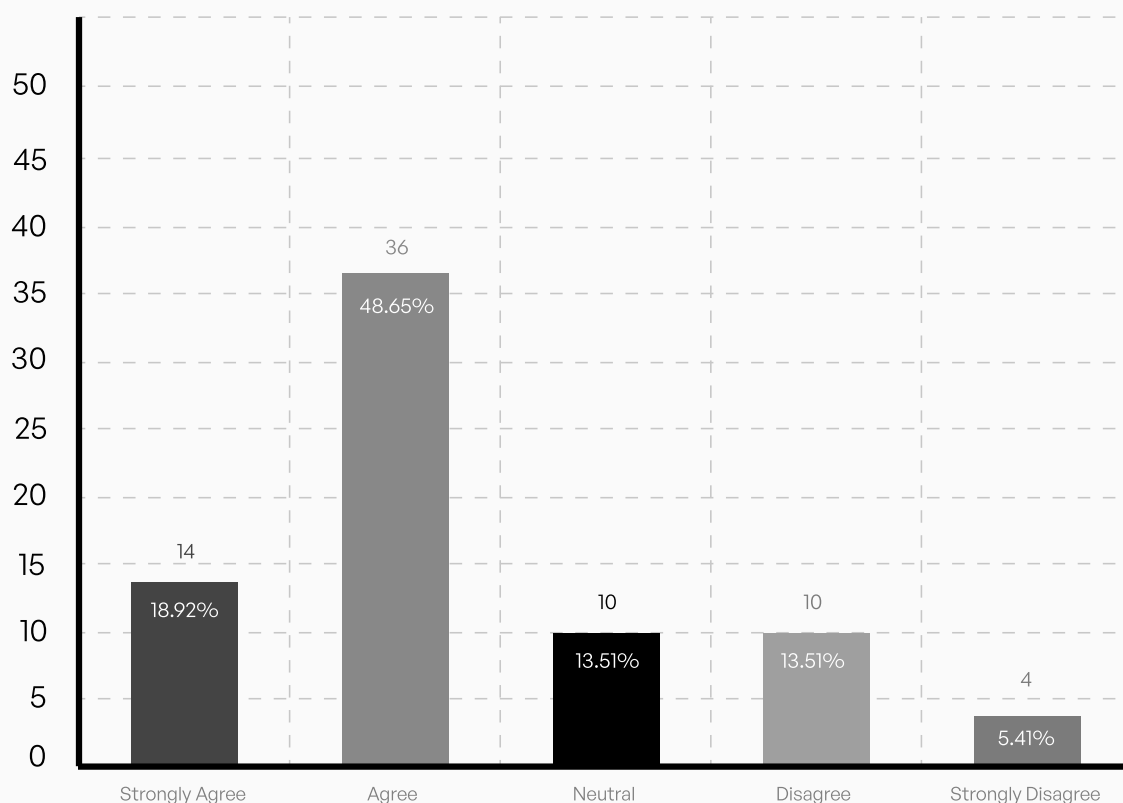


Figure 4: Respondents' Perceptions of Gender-Based Barriers to Digital Access

Figure 4 above shows that a substantial number of respondents perceive that girls face more barriers than boys in accessing computers and the internet, which affects their participation in digital skills training. Specifically, 49% of respondents (36 participants) agreed with this statement, indicating that gender-related challenges are a significant concern.

Responses were more divided beyond this majority. About 14% (10 participants) selected "neutral," suggesting some uncertainty or recognition of barriers without fully attributing them to gender.

Meanwhile, 14% (10 participants) disagreed, likely reflecting a view that access challenges are similar for all participants, regardless of gender. Only 19% (14 participants) strongly agreed, while 5% (4 participants) strongly disagreed.

Overall, the prominence of "Agree" on the chart demonstrates that, despite some differing opinions, many respondents recognise that girls face additional obstacles that hinder their engagement and success in digital skills training.

4.4. Conclusion

Access to computers and reliable internet connectivity is a foundational determinant of girls' participation in digital skills training. When devices, data, and stable electricity are absent, even motivated learners are blocked before they begin. For many girls, the barrier is not willingness but the financial and infrastructural realities that make consistent engagement impossible.

Gender disparities deepen these challenges further. Within households, boys are prioritised in device access while girls navigate conditional usage tied to domestic responsibilities. These dynamics confirm that the digital divide is a resource gap and a gendered one.

Chapter 5:

Gender Stereotypes as a Barrier to Girls' Participation in Digital Skills Development

Young researchers: Omotunde Joanna, Fashina Rukayat, Martins Adefunke, Jimoh Suliat

5.1. Introduction

The rapid advancement of digital technology has fundamentally transformed the global economy, creating new opportunities for innovation, employment, and social development (Matyushok et al., 2021). Digital skills are now indispensable for educational attainment, workforce participation, entrepreneurship, and meaningful inclusion in the digital economy. However, this transformation has also intensified existing inequalities, particularly along gender lines (Hillenbrand et al., 2015). The persistent gender digital divide continues to limit girls' access to digital tools, training, and opportunities, thereby restricting their full participation in the digital economy (World Bank, 2016).

A central factor underpinning this disparity is the prevalence of gender stereotypes. Gender stereotypes are socially constructed beliefs and generalised assumptions about the roles, abilities, and characteristics considered appropriate for women and men.

Within the context of digital skills development, gender stereotypes play a critical role in shaping girls' engagement with digital learning. These deeply embedded societal beliefs often create a perceived mismatch between girls and technology-related fields, framing digital and technical skills as masculine domains. Research shows that these stereotypes emerge early in life, with children more likely to associate technology with boys than with girls, thereby influencing aspirations long before formal training begins (Olsson & Martiny, 2018). Such beliefs are reinforced through family expectations, educational practices, peer interactions, media representations, and institutional cultures.

The consequences of gender stereotypes extend beyond access to digital tools. Although girls frequently demonstrate strong digital literacy and learning capacity, social and cultural constraints can undermine their confidence, reduce interest, and discourage sustained participation in digital skills training or technology-related careers (UNESCO, 2017). In regions such as Sub-Saharan Africa, where the digital economy presents significant opportunities for inclusive growth, the continued underrepresentation of women in digital fields poses both social and developmental challenges (Voufo et al., 2025).

Despite a growing body of literature on gender disparities in digital skills, much existing research focuses on access gaps or broad national and regional trends. There remains limited empirical evidence examining how gender stereotypes specifically shape girls' participation in digital skills development within localized educational and training contexts in Nigeria.

5.2 Purpose of the study

This component of our study seeks to examine how gender stereotypes shape girls' participation in developing digital skills, with particular attention to how these stereotypes affect confidence, engagement, and sustained learning. The chapter aims to understand how young women themselves define and experience gender stereotypes, how different forms of stereotyping influence their decisions to enroll and remain in digital training programmes, and how inclusive participation strategies can help mitigate these barriers.

Specifically, the study explores what young women identify as gender stereotypes in digital learning spaces, how these stereotypes affect their confidence and participation in digital skills programmes, and in what ways inclusive strategies contribute to overcoming these constraints. Through this analysis, the chapter contributes context-specific evidence to inform inclusive programming and policy interventions that promote equitable digital participation.

5.3. Findings and analysis

5.3.1. What do young women identify as gender stereotypes?

Participants describe gender stereotypes as attitudes and behaviors that portray boys as naturally more skilled in digital technologies, leaving girls feeling inferior and unwelcome in learning spaces. Mercy (19) shared, "Boys bully me because they know more about digital skills; this made me feel less of myself," while Victory (24) noted, "I don't feel confident telling people about what I do anymore because one negative comment can kill my interest." Repeated exposure to such messages can internalise self-doubt, limiting girls' participation.

These stereotypes are reinforced when boys receive preferential attention, are assigned more technical tasks, or have stronger abilities assumed rather than questioned.

Such practices, intentional or not, normalise assumptions of male competence in technical or technology spaces. The findings illustrate that stereotypes are embedded in daily interactions, shaping both perception and participation.

"Some facilitators support boys more than girls in the training I attended." - Chinaza (19)



5.3.2. How do gender stereotypes affect girls' participation in digital skills programmes?

The findings indicate that gender stereotypes significantly influence girls' participation in digital skills programmes by discouraging enrollment, reducing confidence, and limiting sustained engagement. Stereotypes that portray digital skills as a male-dominated field create feelings of intimidation and exclusion, making girls hesitant to join or remain in digital training. As Chinanza (19) stated, *“When I enter a digital class and see mostly boys, I feel like I’m not supposed to be there, even before the training starts.”*

Beliefs that technology is too difficult or unsuitable for girls further heighten self-doubt and fear of failure. Memunat (24) shared, *“Yes, there are mindsets that girls can’t do tech... some people feel it’s too hard.”* Even well-meaning family support may fail to counter these stereotypes. Balikis (20) noted, *“At home, my parents questioned why I need to learn digital skills since I’m a girl.”*

The lack of visible female role models in technology also limits girls and young women’s ability to envision themselves in digital careers, and denies them access to guidance from individuals who have navigated similar barriers. Memunat (24) reflected this gap in her comment, *“For me personally, I get people impressed, because around my community, you don’t have girls who are doing so well.”*

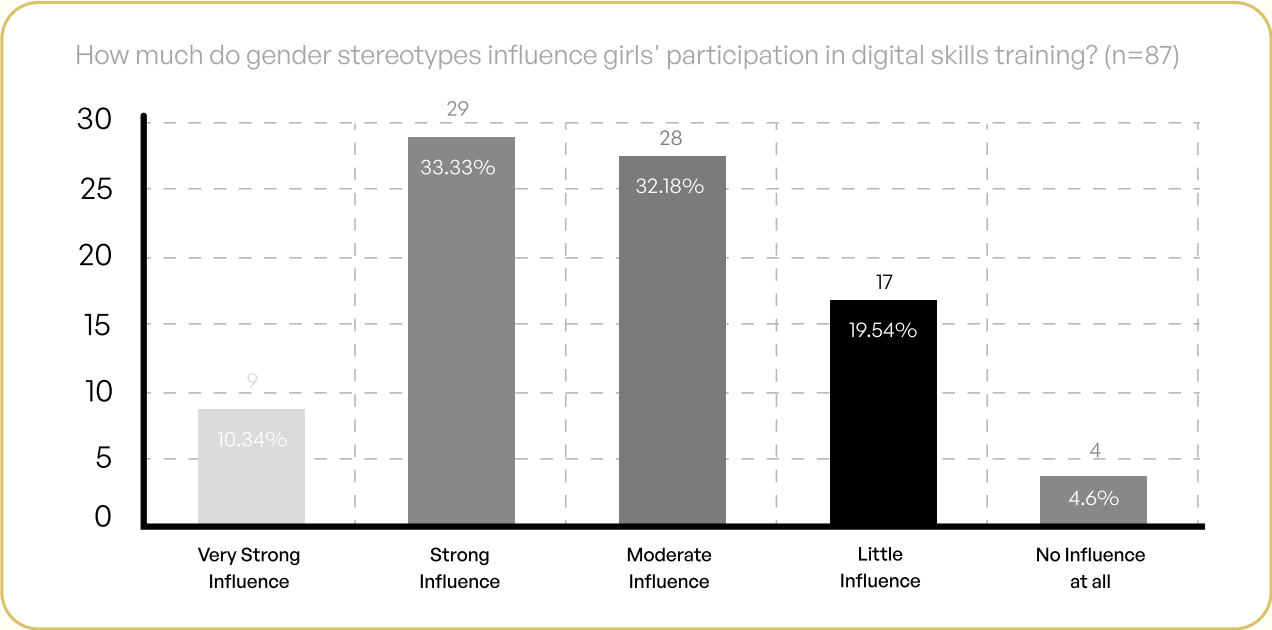


Figure 5: Influence of Gender Stereotypes on Girls' Participation in Digital Skills Training

5.3.3. How do inclusive participation strategies help girls overcome gender stereotypes?

Inclusive participation strategies help girls overcome gender stereotypes by creating supportive social and learning environments that build confidence and encourage engagement. **Because stereotypes are reinforced by family, community, and cultural expectations, interventions that address these contexts are more effective than isolated approaches.**

At the family and community level, awareness and sensitisation increase support for girls' participation in digital skills training. When parents and community members understand that digital skills are for both boys and girls, they are more likely to encourage rather than discourage involvement. Racheal (24) explained, ***“When parents and community members understand that digital skills are for everyone, they stop discouraging girls and start supporting them.”***

Within training spaces, inclusive teaching practices help girls feel valued and capable. Participants reported that facilitators who encourage girls equally and avoid framing digital skills as a male domain increase willingness to participate. Inioluwa (20) shared, ***“When trainers encourage girls and don't treat digital skills as a boys' thing, it makes us more confident to take part.”***

Mentorship and exposure to female role models further support girls in challenging stereotypes and sustaining motivation. Seeing women succeed in technology helps girls believe they can succeed as well.



“Seeing women who are successful in tech shows me that it is possible and motivates me to continue.”

- Esther (23)



Overall, the findings suggest that social and cultural approval is often the primary barrier to participation, and inclusive strategies help create environments where girls can learn, grow, and thrive.



5.4. Conclusion

Gender stereotypes remain a significant barrier to girls' participation in digital skills development. These stereotypes operate across family, community, and institutional systems, shaping confidence, access, engagement, and long-term aspirations.



The findings reaffirm that girls' underrepresentation is not rooted in incapacity but in socially constructed limitations.

Addressing these barriers requires systemic, inclusive approaches that engage households, institutions, and training environments to ensure that digital participation is genuinely equitable.

Chapter 6:

The Role of Social Media in Nigerian Girls' Engagement with Digital Skills Training Opportunities

Young researchers: Arihi Joy Chinanu, Ojo Taiwo Ololade, Oluwalanke Elizabeth, Adekanmbi Oluwabukunmi Adeyinka

6.1. Introduction

Social media has expanded beyond entertainment to become a key space for learning and skill acquisition among young people in Nigeria (PK Tetteh, PK Kankam, 2024).

Platforms such as WhatsApp, Instagram, Facebook, and TikTok provide access to information about digital skills training in contexts where schools, libraries, and ICT centres are limited. In environments where formal infrastructure is constrained, these platforms function as informal learning spaces through which young people discover opportunities, connect with peers, and access training resources.

However, despite increased smartphone access, challenges such as high data costs and unequal access to devices continue to affect girls' ability to fully benefit from these opportunities.

6.2. Purpose of the study

This study examines how social media shapes Nigerian girls' awareness, motivation, participation, and confidence in digital skills training, including coding, web development, design, and digital marketing. It explores how online activities encourage girls to discover training opportunities, the ways digital engagement sustains or limits participation, and how these interactions influence their confidence in learning digital skills.





By analyzing the opportunities and barriers embedded within social media use, the study provides gender-focused insights into how peer networks, family support, mentorship, and digital content interact to shape engagement. The findings are intended to inform educators, NGOs, and policymakers seeking to design inclusive and effective social media-based digital training initiatives (Adewale, 2025).

6.3. Findings and analysis

6.3.1. Social media as a motivator for access to digital skills training

Social media serves as an important entry point through which girls discover and develop interest in digital skills training. Platforms facilitate awareness by sharing success stories, advertising training programmes, hosting live tutorials, and building peer support networks. This combination of visibility and interaction helps transform digital platforms into informal gateways to learning opportunities.

Participants emphasised that exposure to relatable success stories, (especially from other women in technology) significantly increased their interest.

Testimonials, project showcases, and announcements of free training programmes on WhatsApp status, Instagram, Facebook, and TikTok made digital skills appear both accessible and attainable. The availability of free programmes further reduced financial hesitation and strengthened motivation to explore opportunities.

“I first heard about the coding class on a WhatsApp group,”
- Taofeeqoh (22)

“Seeing other girls post their projects on Instagram made me want to join too.” - Remi (21)

“I came across girls giving testimonies regarding the digital skills and that got me intrigued.” - Bukunmi (19)



Although barriers such as digital literacy gaps, unequal internet access, and misinformation persist (Adewojo & Momoh, 2025), **the findings demonstrate that peer-driven and visually engaging social media content plays a central role in motivating girls to pursue digital skills training.**

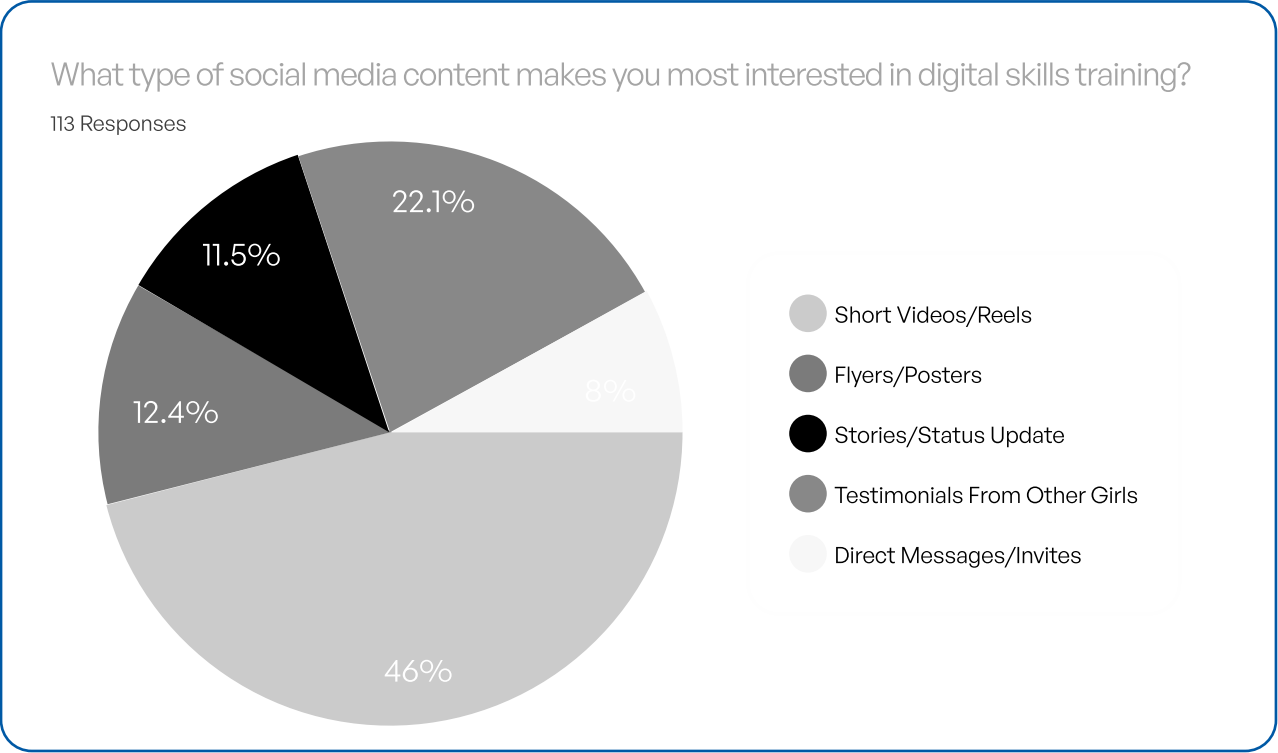


Figure 6: Social Media Content Influencing Girls’ Interest in Digital Skills Training

Figure 6 illustrates that visually engaging, concise content such as short videos and reels (46%) has the greatest influence on girls’ interest, followed by peer testimonials (22%).

Stories and status updates (12%), flyers and posters (12%), and direct messages (8%) also contribute, indicating that interactive, peer-led content is most effective for stimulating motivation.

6.3.2. Influence of social media on girls’ participation in digital skills training

Social media platforms and digital communities strengthen girls’ participation in digital skills training by providing motivation, encouragement, and peer support that keep them engaged in digital skills training sessions.

Interaction with mentors and exposure to success stories strengthen confidence, while access to information and learning resources supports continued participation.

Overall, social media engagement helps girls stay committed to digital skills training and reduces the likelihood of dropping out. This was reflected in comments from Agatha (24), “Our Telegram group helped me keep up with the lessons,when others shared their progress, it pushed me not to drop out.”

Additionally, social media supports the development of digital literacy skills — such as communication, collaboration, creativity, and critical thinking — that are crucial for effectively engaging with training content.

This was reflected in the experience of Damilola (20), who shared her experience in verifying the authenticity of a digital training programme before participating: "The first time I heard about it was last year, the website, people's testimonies... I also double checked. I went online to do research and find out what kind of people have benefitted from this programme."

Social media also provides a space for girls to document and share their learning journeys, contributing to a wider culture of visibility around digital skills development. Darasimi (23) captured this: "I'm into web development, currently learning JavaScript and documenting my progress on X."

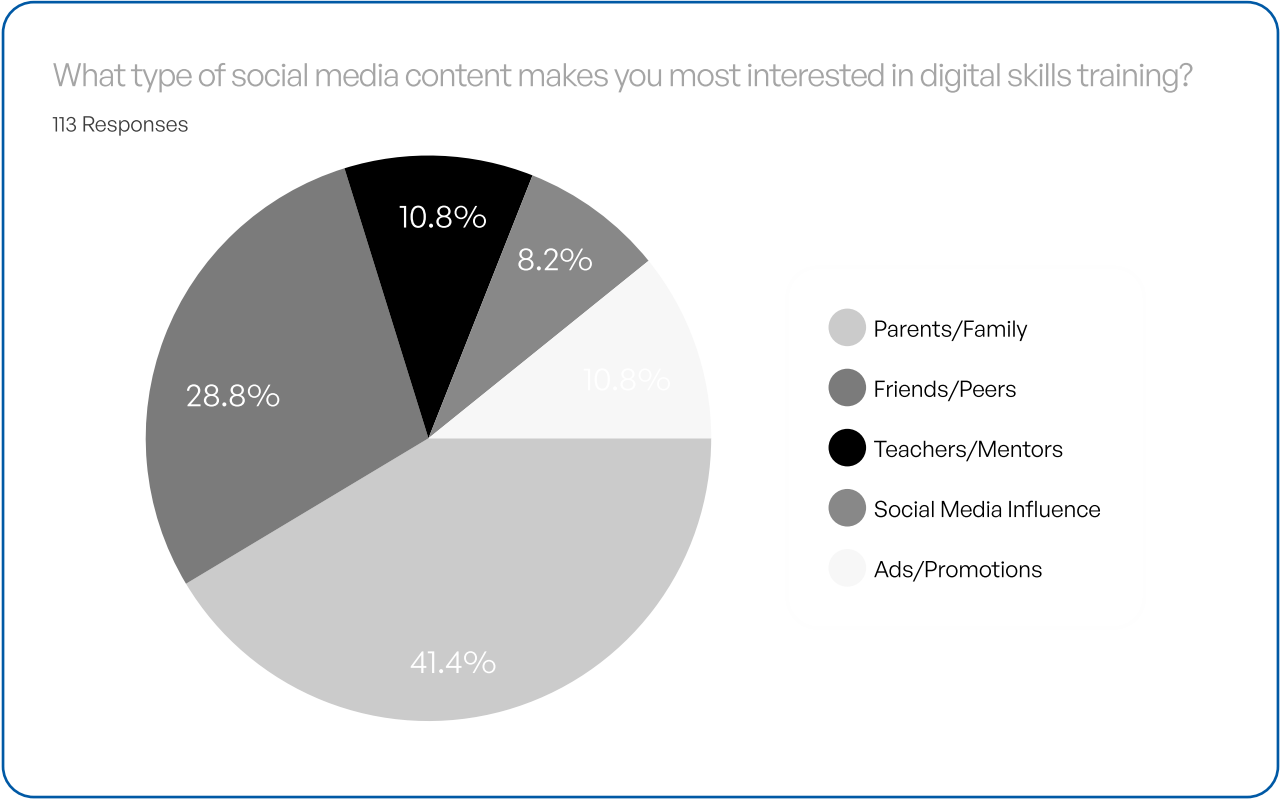


Figure 7: Factors Influencing Decisions to Participate in Digital Skills Training

Figure 7 presents the factors influencing girls' decisions to participate in digital skills training. Parents and family emerge as the strongest influence (41%), underscoring the central role of household support and approval in shaping educational choices. Friends and peers follow at 29%, highlighting the importance of shared experiences and social encouragement in decision-making.

Teachers and mentors account for 11%, reflecting the contribution of formal guidance, while advertisements and promotions (11%) and social media influencers (8%) represent comparatively limited influence.

Overall, the findings indicate that close interpersonal networks, particularly family and peers, play a more decisive role in participation than media-driven or promotional sources.

6.3.4. Social media and girls' confidence in learning digital skills

Social media influences girls' confidence in both enabling and constraining ways. Exposure to tutorial videos, online mentors, peer feedback, and visible project outcomes often strengthens self-belief and encourages experimentation with digital tools. As Mariam (19) explained, *“Watching tutorial videos made me feel like I could do it.”* Such accessible learning content helps demystify technical skills and makes digital learning appear achievable.

However, confidence can be undermined by structural and social barriers. Financial constraints, including paid course requirements, limit continued participation and reduce self-efficacy. Gender bias further affects confidence, particularly in male-dominated fields. Daniella (20) noted, “Learning GSM repair was quite challenging because it was dominated with boys,” illustrating how gendered environments can discourage persistence.

Parental perceptions also play a significant role. When social media is viewed primarily as a distraction or a risky space, restrictions on phone and internet use reduce access to tutorials and online learning communities. Although often motivated by safety concerns (such as fears of cyberbullying or harassment), these limitations can unintentionally signal that digital spaces are unsuitable for girls.

Overall, while social media can build confidence through visibility, mentorship, and accessible resources, its positive impact depends on supportive home environments, affordable training opportunities, and inclusive digital spaces.



6.4. Conclusion

Social media plays a multifaceted role in Nigerian girls' engagement with digital skills training. It serves as a discovery engine, motivational environment, peer accountability system, and confidence-building platform.

However, its impact is mediated by structural realities including parental control, financial access, digital literacy, and persistent gender stereotypes. While social media holds transformative potential for expanding girls' participation in digital skills development, its effectiveness depends on integrating online engagement strategies with inclusive offline support systems.

These findings highlight the importance of leveraging social media intentionally within gender-responsive digital education policies and programmes to ensure that awareness translates into sustained participation and meaningful skill acquisition.

Chapter 7:

The Impact of Digital Skills Training on Girls' Preparation for Employment

Young researchers: Abdullahi Ummu Salmat, Omoniye Boluwatife, Olofin Beulah, Oyewunmi Mary

7.1. Introduction

In today's labour market, the ability to use digital tools, communicate online, and adapt to technological change is increasingly central to employability (World Bank, 2021; Govender, 2025). Beyond technical proficiency, digital skills contribute to broader capacities such as information access, problem-solving, and adaptability, all of which shape long-term career prospects.

Despite this growing importance, girls and young women continue to face structural barriers to digital learning. Socio-economic constraints, cultural expectations, and unequal access to devices and connectivity limit participation (Wignall et al., 2024; World Bank, 2021). During data collection, Suliya (21) explained: *"Girls in my community face financial constraints. I live in a rural area, and most girls there cannot afford devices or internet access for training. They are also unaware of what to get and where to get them."* Her account illustrates how financial limitations and information gaps intersect to reinforce the digital gender divide (Van Deursen & Van Dijk, 2024).

These disparities extend beyond training access to labour market outcomes. Evidence suggests that digital skills strengthen women's employment prospects by enhancing human capital, expanding access to job information, and reducing gender-based barriers (OECD, 2024; Wignall et al., 2024). In Nigeria and other developing countries, digital literacy has been shown to support young people's transition into the workforce by improving job readiness and employment outcomes (Springer, 2026). Training programmes also foster communication skills, confidence, and adaptability; qualities essential for navigating contemporary work environments (Govender, 2025).

However, persistent gender inequalities in access to digital training continue to limit these benefits, underscoring the need for more inclusive and context-sensitive approaches (OECD, 2024).



7.2. Purpose of the study

Our study examines the impact of digital skills training on girls' preparation for employment. It investigates how participation influences their confidence in seeking job opportunities, strengthens employability skills such as communication, problem-solving, and adaptability, and expands access to professional networks and employment pathways.

We also explore the challenges girls face in translating acquired digital skills into real-world employment opportunities. By identifying both outcomes and constraints, our research generates evidence that can inform the development of inclusive digital skills programmes that better support girls' transition into the labour market.

Central to our investigation is how newly acquired digital knowledge shapes girls' preparedness for the job market. We examine the extent to which digital skills training enhances soft skills such as communication, problem-solving, adaptability, and confidence, which are critical for workplace success. The study also explores whether participation in digital training facilitates access to professional networks, mentorship, and employment opportunities that support girls' transition into the labour market.

7.3. Findings and analysis

7.3.1. Digital knowledge and preparedness for the job market

Acquiring digital skills reshaped girls' perceptions of their place within the labour market and strengthened their readiness to pursue technology-related careers. For many participants, new technical knowledge directly challenged entrenched gender stereotypes that frame fields such as web development and graphic design as male-dominated.

By gaining practical competencies in these and other areas such as coding and hardware maintenance, girls reported feeling better equipped to compete and more confident in presenting themselves as capable professionals.

“the digital skills knowledge has helped me break the stereotype that tech is only for the male gender and they do better at it than girls.” - Remilekun (20)

“I used to think tech was too difficult or only for experts, but now I feel confident pursuing tech roles and combining them with my other interests as a fashion designer.” - Rhoda (22)



These accounts suggest that digital training contributes not only to technical preparedness but also to identity transformation. By redefining what is perceived as possible for them, girls move from passive observers of the digital economy to active participants preparing for competitive labour market roles.

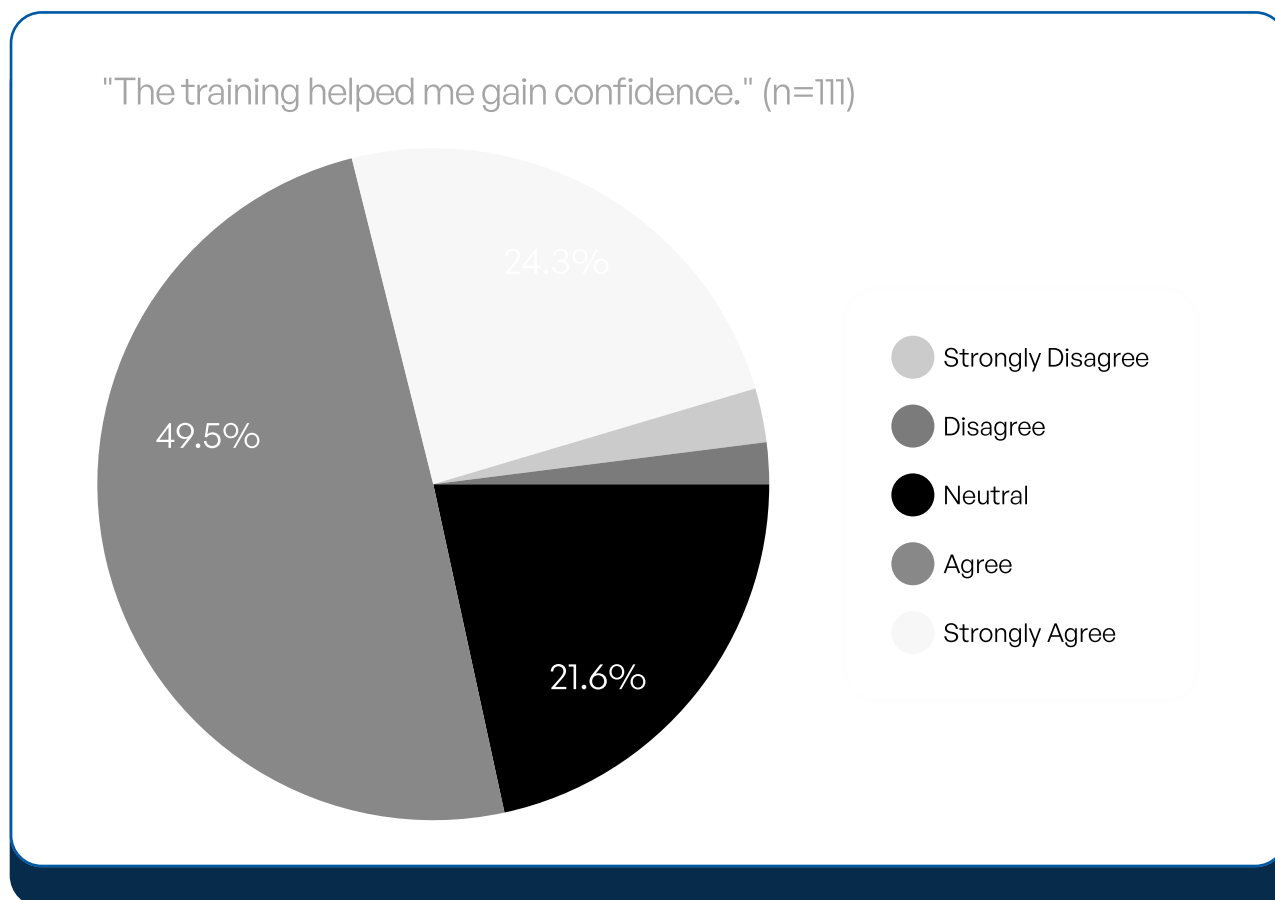


Figure 8: Quantitative Responses on Confidence Growth After Digital Skills Training

7.3.2. Soft skills development and work readiness

Beyond technical knowledge, digital skills training strengthened key soft skills that enhanced girls' readiness for employment. *Participants highlighted motivation, self-discipline, teamwork, communication, and time management as critical outcomes of their training experiences.*

For some, limited access to resources fostered independence and resilience. Temiloluwa (20) explained, *"I did not have a computer system for self-practice, and there was no personal teaching where I learnt. I often had to learn some things on my own."* Her experience reflects the development of self-directed learning and persistence, qualities highly valued in modern workplaces.

Collaborative learning environments also strengthened interpersonal skills. Racheal (21) noted that *"being part of a team taught me how to listen, share ideas, and contribute meaningfully,"* increasing her confidence in group tasks. Similarly, Moyo (22) reported that the training improved her ability to *"manage my time, meet deadlines, and take responsibility,"* reinforcing professional habits essential for workplace performance.

These findings indicate that digital skills programmes contribute not only to technical competence but also to the behavioural and interpersonal capacities important to long-term employability.

"The training helped me improve communication and teamwork." (n=110)

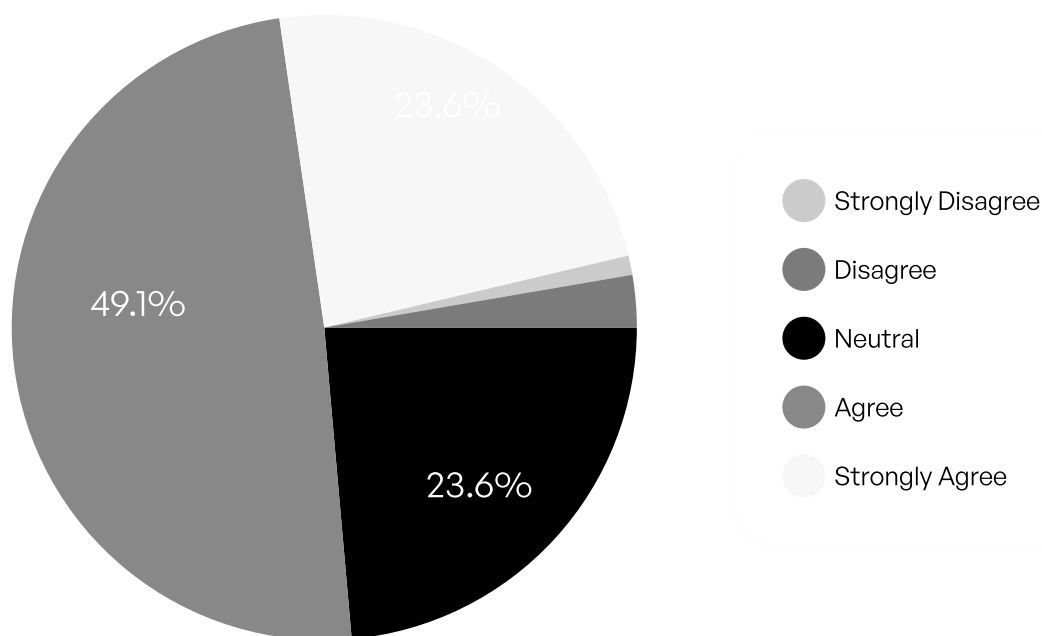


Figure 9: Quantitative responses on soft skills developed through digital skills training

7.3.3. Networks, professional visibility, and access to employment

Participants reported developing professional connections that enhanced their access to employment opportunities, particularly through platforms such as Instagram, LinkedIn, Twitter (X), and WhatsApp. These networks provided access to job information, mentorship, scholarships, and freelance opportunities, extending the impact of digital skills training beyond the classroom.

"I actively engage on different social media platforms like Instagram and LinkedIn, connecting with people in the same field, and I also apply for scholarships." – Rachael (21)

I post on my WhatsApp status and personally go to people's direct messages to pitch my work." – Marvellous (21)



These accounts demonstrate how participants used digital platforms strategically to increase visibility and position themselves within professional networks.

Digital skills training therefore functioned as a bridge between learning and labour market entry. Beyond acquiring technical competence, girls developed the confidence to present portfolios, certificates, and projects online, expanding their employment horizons to include remote and freelance opportunities. Remilekun (20) reflected this shift: *“I’m not a ‘social media person’, but I have been trying to put myself out there to gain more visibility.”*

A recurring theme across interviews was a psychological shift from self-doubt to professional identity. Mastering complex tasks such as coding or hardware maintenance reduced internalised beliefs that technology is “too difficult” or for men only, broadening career aspirations beyond traditionally expected roles. Even structural challenges, such as lack of personal laptops and unreliable electricity, contributed to the development of resilience and problem-solving skills valued in contemporary work environments.

Overall, the findings indicate that digital skills training enhances employment access not only by building technical expertise but also by expanding networks, strengthening professional confidence, and fostering adaptability in competitive labour markets.

Chapter 8:

Recommended Actions for Policymakers and Practitioners

8.1. Policy recommendations

The following recommendations are grounded directly in the evidence gathered across all five studies. They are intended for government agencies, training providers, educational institutions, non-governmental organisations (NGOs), and development partners with a stake in expanding digital participation for Nigerian girls.

8.1.1. Make trainings free

Training fees, even modestly priced ones, are a decisive barrier for girls from low-income households. Subsidised or fully free programmes paired with device access and data support must be the baseline for this demographic. Without removing the upfront cost, all other interventions reach only those who could already afford to participate.

- **Government (Federal Ministry of Communications, Innovation and Digital Economy; Ministry of Education):** Establish and fund a national digital skills bursary scheme targeting girls from low-income households, and mandate that publicly funded training programmes are offered free of charge to female participants.
- **Private sector (telecoms companies, technology firms):** Partner with training providers to sponsor free data bundles and device access for enrolled girls, and offer corporate-funded scholarships for digital skills programmes.
- **UN and development partners:** Fund and scale free training initiatives in underserved communities, prioritising girls who face multiple layers of disadvantage.
- **NGOs:** Identify and refer eligible girls to free programmes, and advocate for the removal of indirect costs such as transportation and materials fees.



8.1.2. Solve the device and connectivity gap

Girls who attend training on mobile devices and cannot practise on computers fall behind and drop out. Community and school-based tech hubs with laptops, stable power, and free Wi-Fi are a practical solution, as they reduce dependence on personal devices and create consistent spaces for hands-on learning.

- **Government (Ministry of Communications; Ministry of Power):** Invest in the expansion of community technology hubs equipped with computers, solar power, and reliable internet connectivity, prioritising underserved communities.
- **Education institutions (universities, polytechnics, secondary schools):** Open computer labs outside of teaching hours to provide girls with supervised practice time, and integrate device lending schemes into existing student support systems.
- **Private sector (device manufacturers, SMEs, tech companies):** Donate or subsidise refurbished laptops for community hubs and training programmes, and partner with training providers to provide on-site technical support.
- **UN and development partners:** Fund the establishment and maintenance of girls-accessible tech hubs, and support infrastructure assessments to identify the communities most in need.



8.1.3. Design programmes that are inclusive by default

Designing inclusive programmes means purposefully recruiting female facilitators, training all instructors to identify and counter gender bias, and structuring environments where girls are not outnumbered, overlooked, or assumed to be less capable. Girls-only sessions and peer learning groups within mixed programmes have proven effective at building the confidence girls need to persist.

- **Government (Ministry of Education; Ministry of Women Affairs):** Introduce gender-responsive standards for publicly funded digital skills programmes, and require training providers to demonstrate inclusive design as a condition of funding.
- **Education institutions:** Recruit and retain female digital skills instructors, embed gender sensitivity training into staff development programmes, and create dedicated girls-only learning spaces within existing facilities.

- **Private sector:** Apply inclusive hiring and training standards to corporate digital skills initiatives, and support the development of gender-responsive curricula through partnerships with training providers.
- **NGOs:** Provide technical assistance to training providers on inclusive programme design, and conduct independent assessments of whether existing programmes meet gender-responsive standards.
- **Girls and young women:** Provide honest feedback on their training experiences, advocate within their institutions for more inclusive environments, and support peers who face intimidation or exclusion.

8.1.4. Invest in mentorship and role model visibility

Seeing women succeed in technology is one of the most powerful motivators identified across the research. Structured mentorship programmes (either in person or through online communities) give girls access to guidance from people who have navigated the same barriers. This directly shapes whether girls enrol, persist, and go on to employment.

- **Government:** Fund national mentorship programmes that connect girls in digital training with professional women in technology, and recognise and celebrate female digital leaders through public platforms.
- **Private sector (tech companies, SMEs):** Establish formal employee volunteering schemes that deploy female professionals as mentors, and create visible platforms for women in technology to share their career journeys.
- **Education institutions:** Embed mentorship as a structured component of digital skills programmes, and create alumni networks that connect current students with women who have progressed into technology careers.
- **UN and development partners:** Support the development of regional and national networks of female technology mentors, and fund research into which mentorship models are most effective for girls in Nigeria.
- **Girls and young women:** Actively seek out mentors, engage with online communities of practice, and share their own progress publicly to inspire peers and younger girls.



8.1.5. Strategic use of social media

Social media is already how many girls discover training opportunities and stay committed to programmes. Short videos, peer testimonials, and active digital communities are among the most effective tools for both outreach and retention. Programmes should deliberately embed social media engagement into the learning and support structure.

- **Government:** Use official government social media channels to promote free training opportunities, amplify success stories of women in technology, and counter misinformation about digital skills programmes.
- **Private sector:** Invest in social media campaigns that showcase relatable female role models in technology, and partner with influencers and content creators to reach girls in underserved communities.
- **NGOs:** Create and maintain active digital learning communities on platforms such as WhatsApp and Telegram that provide peer support, programme reminders, and shared resources.
- **Education institutions:** Integrate structured social media engagement into programme design, including peer accountability groups and progress-sharing platforms.
- **Girls and young women:** Share their learning journeys publicly, contribute to peer support communities, and help verify and amplify information about credible training opportunities within their networks.



8.1.6. Bring families and communities into the conversation

Parental approval is one of the most influential factors in whether girls participate. When families view digital skills as irrelevant or inappropriate for girls, no amount of outreach to the girls themselves is sufficient. Community sensitisation workshops focused on the economic value of digital skills and basic online safety can shift the household environment from a barrier into a source of support.

- **Government (Ministry of Women Affairs; Ministry of Information):** Fund and coordinate community sensitisation campaigns that communicate the economic returns of digital skills for girls and young women, and engage religious and community leaders as advocates.
- **Education institutions:** Host open days and information sessions for parents, showcasing what girls are learning and the employment opportunities that follow.
- **NGOs:** Design and deliver community workshops that address parental concerns around online safety, cultural appropriateness, and the long-term value of digital education for girls.

- **Private sector:** Support community engagement initiatives by sharing data on the economic value of digital skills, and create visible employment pathways that demonstrate the return on investment for families.
- **Girls and young women:** Share their experiences and progress with family members, and help translate the value of digital skills into terms that resonate within their household and community contexts.

8.1.7. Measure what matters

Enrolment numbers alone do not tell us whether programmes are working. Providers should track completion rates, skill retention, confidence levels, and employment outcomes, with results filtered by gender and socioeconomic background. Regular feedback from participants should shape how programmes evolve, ensuring that what is designed in good faith is actually delivering results for the girls it is meant to serve.

- **Government:** Establish a national digital skills monitoring framework that requires all publicly funded programmes to report gender-disaggregated outcomes and publish findings annually to drive accountability.
- **Education institutions:** Conduct regular programme evaluations that include participant feedback, tracking not just completion but confidence, skill retention, and post-training employment.
- **Private sector:** Apply rigorous impact measurement to corporate digital skills investments, and share anonymised outcome data with government and development partners to contribute to the national evidence base.
- **UN and development partners:** Fund independent evaluations of digital skills programmes, support the development of standardised gender-responsive monitoring tools, and use findings to inform programme design across Nigeria and the wider region.
- **NGOs:** Collect and amplify participant feedback, particularly from girls who drop out or do not complete training, whose voices are often missing from programme evaluations.
- **Girls and young women:** Actively participate in evaluations and feedback processes, and advocate for changes when programmes are not meeting their needs.

8.2. Conclusion

The five studies that make up this report were conducted independently, yet they consistently point in the same direction. Nigerian girls are motivated to participate in digital skills training, and when they do, the outcomes are meaningful. They gain technical competence, grow in confidence, develop workplace-ready soft skills, and begin to see themselves as credible participants in a digital economy that has long excluded them. However, their major obstacle remains access.

What this research makes clear is that the barriers girls face are interconnected and mutually reinforcing. A girl who cannot afford a device is also the girl whose household prioritises her brother's education. She is also the girl who relies on social media to find out about free training, only to discover she cannot afford data consistently enough to attend. She is also the girl who, when she does make it into a training room, encounters assumptions that she is less capable than the boys beside her. Each barrier compounds the others, and addressing only one while leaving the rest intact will not be enough to ensure that girls can enrol, stay enrolled, build lasting skills, and ultimately transition into a digital economy that works for them.

The evidence also reveals where real leverage exists. Social media, used intentionally, can reach girls who are otherwise disconnected from formal information channels and sustain their commitment through peer networks and shared learning. Inclusive training environments where facilitators actively challenge gender assumptions and girls see women succeeding in technology demonstrably shift confidence and participation. And when girls complete training and enter professional networks, the benefits extend well beyond individual employment, as they become the visible role models that make the next girl's path easier.

Nigeria's digital economy will not reach its potential if half the population is structurally excluded from participating in it. The findings from this research are a call for deliberate, coordinated action and integrated investment across economic support, infrastructure, inclusive programming, and community engagement. The girls who participated in this research have contributed valuable evidence that can inform meaningful change. It is hoped that this report serves as a practical resource for stakeholders committed to building a more inclusive digital future for Nigerian girls and young women.

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Meet the Young Researchers

Study 1: Economic barriers hindering girls' access to digital skills training



Ejiaku Chisom is a web developer, tech volunteer, digital researcher, mobile photographer, and science laboratory student. She participated as a young researcher under the YPARE program, gaining experience in digital research and technology-driven barriers. Passionate about using technology to create social impact, she aspires to become a healthcare professional while balancing technology, research, and innovation to support education, digital literacy, and sustainable development.



Ogunbowale Kanyinsola is a web developer, tech volunteer, researcher, and bag artisan. She participated as a young researcher in the YPARE program under the Girls' Education and Skills Partnership (GESP), where she gained experience in research, teamwork, and community engagement. She also obtained a certificate in web development through GESP.

She aspires to keep developing her technical skills and contribute to projects that empower communities through technology and education.



Ojeyinka Mosunmola is a GSM and Mobile Phone Technician based in Agege. She participated as a young researcher in the YPARE program under GESP, where she gained experience in research, teamwork, and building confidence in both formal and informal settings. She also obtained a certificate in GSM and Mobile Repair and Maintenance through GESP Yabatech Training.

She is committed to developing her technical and communication skills to empower others in her community to acquire digital and technical skills.



Oluwaseun Gbadebo is a GSM and Mobile Phone Repairer who participated in the YPARE programme, conducting research on the challenges faced by young people in Agege and Ayobo. Through this experience, she developed a strong passion for using research and technical skills to create practical solutions that improve livelihoods.

She aspires to expand her expertise in mobile technology, empower other young people with digital and repair skills, and contribute meaningfully to community development and innovation.

Study 2: The influence of computer and internet access on girls' participation in digital skills training



Amidat Agunbiade is a student at Yaba College of Technology with a strong interest in technology and research, particularly in networking and information technology. As a young researcher in the YPARE program, she gained experience in youth-led research, problem-solving, and community engagement.

She aspires to build a career that combines technology and research to develop practical solutions that positively impact her community.



Ayodele Glory is a frontend web developer and final-year Business Administration student at the University of Lagos. Trained at CodSoft and through GESP at YabaTech, she built strong web development skills alongside her work as a Personal Assistant and founder of Ife Luxe Events and Surprises.

She aspires to grow as a tech professional, expand her business, and mentor young people in technology while creating projects that improve lives and communities.



Oseiwe Faith Emoyon is a software development learner and young researcher with experience from the YPARE program, where she gained hands-on knowledge in research, critical thinking, and problem-solving. She built a foundation in web development through GESP and is currently expanding her expertise in frontend frameworks such as React. She aspires to work at the intersection of technology, research, and health, developing solutions that improve lives and strengthen communities.



Oziwa Chimela Eliel is a Computer Engineering student at Yaba College of Technology with a passion for technology, creativity, and impact. She participated in the YPARE program under GESP, gaining experience in research, teamwork, critical thinking, and community engagement. As a frontend web developer, she builds modern, responsive, and interactive websites, including immersive 3D web experiences.

She aspires to grow into a skilled tech professional who uses technology to solve problems and create meaningful impact in society.

Study 3: Gender stereotypes as a barrier to girls' participation in digital skills development



Joanna Omotunde is a Chemistry graduate, young researcher, frontend developer, and virtual assistant. Her academic background in Chemistry sparked an interest in research, particularly in medicinal plants and their health benefits. She participated in the YPARE program, where she worked with fellow researchers to examine issues affecting young people in their communities.

She has also trained in frontend web development and virtual assistance, and aspires to use science, research, and technology to develop innovative solutions that improve communities.



Rukayat Fashina is a Computer Science student at Yaba College of Technology, a frontend developer, UI/UX enthusiast, and young researcher. Through GESP and YPARE, she gained experience in research, community engagement, data collection, and presenting findings. She is passionate about building digital products and encouraging more girls to explore opportunities in technology. She aspires to become a leading tech professional, creating impactful digital solutions and inspiring more girls to pursue careers in technology.



Martins Adefunke is an Accounting student at the University of Lagos, a young researcher, web developer, makeup artist, and passionate advocate for the girl child. Through the YPARE program, she developed strong skills in research, critical thinking, and problem-solving, and also trained in web development through GESP. She is committed to using her knowledge and skills to support the empowerment and education of girls and make a positive impact in her community.



Jimoh Suliat Motunrayo is a graduate of Physics with Electronics from Yaba College of Technology. She participated in the YPARE program, developing skills in research, critical thinking, and community engagement, and also trained in Computer Hardware Maintenance and Repair at GESP YABATECH. She is passionate about using technology, research, and innovation to address real-life challenges, and aspires to build a career that creates better opportunities for young people in her community.

Study 4: The role of social media in nigerian girls' engagement with digital skills training



Joy Arihi is a tech enthusiast currently studying Science Laboratory Technology at Yaba College of Technology and Chemistry at the University of Lagos. Through GESP, she trained in web development, served as class representative, and later facilitated the next cohort. She was featured by UNICEF and Generation Unlimited and worked as a young participatory action researcher interviewing girls about digital skills opportunities. She aspires to grow in laboratory science and research, building expertise in applying science to practical challenges.



Taiwo Ololade Ojo is an Accounting student with strong interests in creativity, technology, and personal development. She is also a fashion designer and web developer who participated in the YPARE program, gaining experience in youth-led research and community engagement. She aspires to grow into an impactful individual who uses her skills to create opportunities, inspire others, and make meaningful contributions to her community and society.



Oluwalanke Elizabeth is a Guidance and Counselling student at the University of Lagos, a social media manager, and frontend developer. She participated in the YPARE program under GESP, where she gained experience in research, interviews, community engagement, and collaborative problem-solving. Passionate about understanding the experiences of young people and supporting their wellbeing, she aspires to build a career in technology, youth development, and counselling, using research and advocacy to support young people and contribute to positive change in her community.



Oluwabukunmi Adekanmbi studied Sociology at Ekiti State University and is a young researcher with the YPARE program. Through YPARE, she strengthened her skills in gathering information, working collaboratively, and engaging with communities. She also brings prior professional experience as an Investment and Credit Recovery Officer, which gave her expertise in financial management, communication, and problem-solving. With interests in video editing and content creation, she aspires to build a career that improves society through research and people-centred projects.

Study 5: The impact of digital skills training on girls' preparation for employment



Ummu Salmat Abdullahi is a Computer Engineering graduate with a passion for technology and youth-driven impact. She participated in the YPARE program under GESF, gaining experience in research, collaboration, and community engagement, and also built a solid foundation in web development through GESF.

She continues to grow as a frontend developer and aspires to use technology and research to develop innovative solutions that create opportunities for young people in her community and beyond.



Boluwatife Deborah Omoniye is a Zoology student at the University of Lagos, specialising in Environmental Toxicology and Wildlife Conservation. She participated in the YPARE program, conducting research on challenges facing young people in her community and developing practical, evidence-based solutions.

Through the program, she strengthened her communication skills, built confidence, and developed her ability to work collaboratively. She also works as a virtual assistant and has a background in web development.



Beulah Olofin is an Environmental Toxicology and Conservation student with interests in sustainability, environmental protection, and research. She participated in the YPARE program under GESF, gaining experience in community-based research, data analysis, and collaborative problem-solving. She also has a creative background in graphic design, web development, and visual communication. She aspires to contribute to environmental research and sustainability initiatives that promote healthier communities and support informed decision-making through science and technology.



Oyewunmi Mary is a final-year Zoology student at the University of Lagos with a strong interest in research, technology, and innovation. She participated in the YPARE program, gaining experience in collaborative research and community-focused problem-solving. She is also a digital marketer with experience across social media, SEO, content, and community management.

She is passionate about working with startups and leveraging technology, research, and digital strategy to help innovative ideas grow and create meaningful impact.

